Service Innovation and Performance of Telecommunication Firms in FCT, Abuja

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\textbf{Purpose:} The current study conducts a literature review on service innovation and firm performance in telecoms with a view to develop a synthesis of commentaries on the concept, theoretical underpinnings and empirical evidences from previous studies as a planning phase or guide for future research.

\textbf{Methodology:} A literature review approach was adopted to identify commentaries on service innovation and performance in service centric firms through a meticulous synthesis of information gotten from the articles adopted in the study.

\textbf{Findings:} The findings of this study provides recent update on service innovation and performance of firms in telecoms, following the phenomenal growth and contributions of Information and Communication Technology [ICT] in global economies, with the primary focus of the review on demystifying the concept, dimensions, indicators, theories and empirical evidences. Three [3] major gaps in literature emphasizing geographical spread, methodology and scanty discourse on service centric firms were identified as justification that would permit further empirical tests.

\textbf{Research limitations:} The review to a large extent focuses on service centric firms particularly those in telecoms. This limits generalization of the review to other industry and contexts.

\textbf{Practical implications:} The several revelations of this study would look to guide future studies on the course of service innovation and performance of firms in telecom bearing in mind the specificities in the sector.

\textbf{Originality/value:} This study addresses the daunting task of focusing on service-oriented innovations and firm performance in the service industry through its inclination to the demarcation perspective in examining telecommunication firms.

\textbf{Key words:} Service Innovation, Firm Performance, Telecommunication Firms, New Service Offering, New Service Delivery Method.
INTRODUCTION

The service industry makes up a substantial part of the world economy; with 63.6 percent of the world’s Gross Domestic Product (GDP), and more recently, it has grown to account for more than 80 percent of the GDP [Domínguez-Péry et al., 2013; Maglio et al., 2015; Aker et al., 2019]. This shift towards a more service centric economy and its continuous growth is prompted by the predominant presence of service firms and the global tilt towards a knowledge centric economy [Rust & Huang, 2014; Aker et al., 2019; Li, et al., 2019]. Consequent to this, Bloomberg in 2015, projected that the service industry will grow in both developed and developing countries [90 percent for USA, and 50 percent for both India and China] with a major portion of the growth to be influenced by Information and Communication Technology [ICT] driven innovations or service systems. Based on this, having a service innovation oriented approach is not only strategy for firms in the present time, but a modelled blueprint [Anderson & Ostrom, 2015; Maglio et al., 2015; Ostrom et al., 2015; Aker et al., 2019]. Although service innovation is not a new concept [Miles, 1993], it has garnered momentum in both contemporary, economic and political debates stressing that we live in a “service society”, and that “growth, employment, efficiency, international competitiveness as well as living standards in society depend on service innovations” [Andersson & Mattsson, 2015 p.85].

Service innovation or innovation in services has been found to be a useful tool providing numerous benefits in telecoms and other service industries; providing control for several service systems [Bitner et al., 2008; Presbitero et al., 2017], developing sustainable technologies that allows firms to adjust to the dynamics of the humongous marketplace [Dörner et al., 2011; Tsou & Chen, 2012; Carroll & Carroll, 2016], niche focused strategies enhancing growth [Dwyer & Edwards, 2009], repositioning firms for better performance[Cheng & Krumwiede, 2010; Gong & Janssen 2015; Szczygielski et al., 2017] and evolving services that will strengthen the value propositions of firms[Rayna & Striukova 2009; Hanseth & Bygstad 2015].

However, despite the many benefits and the wealth of scholarship in the field, the dynamics of the marketplace and upsurge in technological advancements, particularly in IT centric firms, perspectives on service innovation and firm performance still remains a debate [Coombs & Miles, 2000; Flikkema et al., 2007; Gallouj & Savona, 2008; Toivonen & Tuominen, 2009]. Studies studying the concept have focused largely on the assimilation and synthesis perspectives [Coombs & Miles, 2000; Flikkema et al., 2007; Gallouj & Savona, 2008; Toivonen & Tuominen, 2009] with few studies focusing on the demarcation perspective which emphasises more on service-centric firms [Drejer, 2004; Droge et al., 2009]. Hence, the urgent need for inquiry into innovation in services and performance of telecommunication firms.

The study aims at providing insights through review of related literatures on service innovation and performance of telecommunication firms through a demystification of the concepts, definitions dimensions and indicators, as well as underpinning theories and empirical evidences available.

The rest of the review proceeds as follows: the next section is the methodology section, which discusses the method and approach utilized in conducting this study. This is followed by literature review, findings and discussions with highlights on directions for future research. Finally, the appropriate conclusion is provided following the earlier discussions.
2.0 METHODOLOGY

The current study adopts a literature review approach to gain insights from scholarly works on the relationship between service innovation and performance of Telecommunication firms. Previous studies adopting this methodology have sought to provide synthesis of literatures in the field (Witsell et al., 2015). The review is structured in three categories: The conceptual review which attempts to define the concept of service innovation and firm performance; the theoretical review which reviews the theoretical underpinnings linking service innovation in service oriented firms and performance, and lastly the empirical review which examines extant service innovation specific discourses and performance in telecoms. Based on close examination of the empirical evidences, the study identifies gaps that would justify for further research on “Service innovation and performance of telecommunication firms in FCT, Abuja”. Having adopted the literature review approach in current study, the authors perceive this step as the planning phase that would allow for a more practical investigation of the dimensions of service innovation and performance of firms in Abuja.

2.0 LITERATURE REVIEW, DISCUSSION AND FINDINGS

As earlier explained in the methodology section of this paper, the literature review comprises of three sections, each of this section and their accompanying subsections or categories is discussed in details.

In this section, a conceptual review is conducted on the study’s two main variables: service innovation and performance of telecommunication firms. The main objectives of this section are to provide historical perspectives of these two variables, provide operational definitions of these two variables, provide an overview of the various ways these two variables have been conceptualized by prior studies, and to clarify exactly how these two variables will be conceptualized in this study.

2.2.1 Conceptual review of service innovation

In this subsection, the history of service innovation is discussed, followed by discussion of the definitional issues surrounding the variable. After that, an overview of the various ways service innovation has been conceptualized by prior studies is presented, and the subsection ends by clarifying how this variable is conceptualized in this study.

2.2.1.1 History of service innovation

The history of service innovation as understood in modern parlance can be traced back to 1993, when Ian Miles of the Manchester Institute of Innovation Research [MIoIR] at the University of Manchester coined the term in his article titled “Services in the New Industrial Economy” [Miles, 1993]. According to Miles [1993], Service Innovation refers to innovation in services, innovation in service processes and innovation in service firms. Innovation in services is related to new service development or service design that usually have technological components while innovation in service processes is related to improving service delivery systems through the use of technology, novel techniques or restructuring the manner in which an organization operates
And lastly, innovation in service firms relates to how service firms enhance their operations and manage innovation in all aspects concerning the day-to-day operation of the business [Miles, 1993]. He went on to hypothesize that such innovation is used as a means of overcoming problems related to providing the service to the client or building up a stock of the service [Miles, 1993].

In 2010, Pim den Hertog, Wietze van der Aa and Mark de Jong of the Amsterdam Centre for Service Innovation [AMSI] at the Amsterdam Business School, developed a new expanded model of service innovation containing six dimensions: “new service concept, new customer interaction, new value system/business partners, new revenue model, new organizational or technological service delivery system” [den Hertog, 2010 p.494.]. The new service concept describes the value created by the service provider and the customer [den Hertog, 2010; Snyder et al., 2016]. Moving on, a new customer interaction facilitates the interaction process between the service provider and the client [den Hertog, 2010]. The new value system which refers to the different players involved in jointly producing a service. It involves an alliance of service providers usually in a value chain [den Hertog, 2010]. The new revenue models involves developing a mix of models that matches distribution costs and revenue in a fashion that will translate into a successful new service concept [den Hertog, 2010; Chen, 2011]. The development of new organizational structures dimension mainly focuses on increasing the efficiency of service workers in the performance of their jobs and in developing innovative services [den Hertog, 2010]. Finally, the new delivery system is about the technological systems and processes involved in delivering a service [den Hertog, 2010; Meigounpoory et al., 2015].

Having given the conceptual origin of service innovation, the next subsection provides a discussion of the definitional issues surrounding service innovation.

2.2.1.2 Definition of Service Innovation

There has been a lack of scholarly consensus as to what exactly constitutes service innovation [Dotzel et al., 2013; Carlborg et al., 2014; Skålén et al., 2014]. This is attributed to the different perception of researchers, specific industry service innovation requirements and the specific context in which it is being used [Dotzel et al., 2013; Carlborg et al., 2014; Skålén et al., 2014]. Nevertheless, Witell et al. [2015], while conducting a systematic review of 1301 journal articles from 1979 to 2014, proposed three perspectives from which “Service Innovation” has been defined over the decades: “Assimilation”, “Demarcation” and “Synthesis” [Witell et al., 2015]. The assimilation perspective hypothesizes that innovation is not restricted to the services alone rather, it can be employed for all types of offerings: products, services or processes [Witell et al., 2015]. For example, innovation from this perspective is defined as “Technology-based inventions, driven by the emergence of new markets or new service opportunities [Ko & Lu, 2010 p. 164]. In another instance, innovation is seen as a tool that drives how a firm leverages its core competencies in responding to opportunities and threats with the context in which it operates [Ferreira et al., 2013]. On the other hand, the demarcation perspective defines service innovation as innovation in a specific service industry with more emphasis on the outcome of such service offering [Witell et al., 2015]. For instance, service innovation is defined as a “New service experience or service solution that consists of one or several of the following dimensions: a new service concept, new customer interaction, new value system/business partners, new revenue mode or new organizational or technological service delivery system” [Breunig et al.,
Again, service innovation is seen as a mechanism that enables the conceptualization of new ideas, new business models through the use of technological [enterprise systems and value chain systems] and non-technological means [investment in employees and customer relationship management] [Enz, 2012].

From the synthesis point of view, service innovation is seen as a unique innovation type that explains the processes utilized in offering a given service and the outcome (service or product) generated by the firm from its offering assortments [Witell et al., 2015]. As exemplified by Skålén et al. [2014], service innovation is the development of frameworks that will result in new value systems for a firm, or refinement of previous methods or practice. In addition, it has also been described as “The commercial application of new knowledge” [Love et al., 2011 p. 1438]. A critical examination of the three approaches or perspectives of defining service innovation suggests an overlap of the three perspective. Regardless, the clear cut distinction of the perspectives lies in the fact that whilst assimilation perspective is used for understanding and exploring different innovation types in different contexts, the demarcation perspective emphasizes service innovation within a specific service industry and lastly, the synthesis perspective dwells more on the development of new service systems or value proposition by enhancing specific processes and outcomes of the firm according to the demands of the wider environment [Love et al., 2011; Enz, 2012; Ferreira et al., 2013; Skålén et al., 2014; Witell et al., 2015].

However, the current study adopts the demarcation perspective of service innovation which defines it as innovation in a specific service industry with more emphasis on the outcome of such service offering [Witell et al., 2015]. The rationale for the selection of this perspective is because, the demarcation perspective is most helpful in understanding service innovation in specific-service oriented industry offering new or improved service related packages advantageous to both the firm and the customers. Therefore, using this perspective, the current study will examine specific service innovations particular to telecommunication firms as clearly stated in the overall objective of this study.

After clarifying how service innovation is defined for this study, the next step is to understand how prior telecommunication-specific service innovation studies have conceptualized this important variable. The next subsection provides this overview and concludes by describing exactly how service innovation is conceptualized in this study.

2.2.1.3 Conceptualization of service innovation in the telecommunication industry

As alluded to in subsection 2.2.1.1, Miles [1993] coined the term ‘service innovation’ and conceptualized it as having three dimensions: 1] A new service offering that did not exist before, 2] a new method of delivering an existing service offering, and 3] the innovation management process within service firms. As mentioned in subsection 2.2.1.2, the demarcation perspective is utilized to define service innovation in this study, which means that only the two dimensions are relevant for this study as they deal with the innovation outcome rather than the third dimension which deals with the innovation process which is not the focus of the demarcation perspective. Typically, the services provided by telecommunication firms includes internet services, voice calls and Short Messaging Services (SMS) [Saxena & Taneja, 2018; Selvaraj & Ragesh, 2018;
Chaputula & Mutula, 2018]. Going by the demarcation perspective adopted in this study, a new service offering as an outcome is exemplified when a telecommunication firm offers an entirely new service from the core business of providing internet services, voice calls and SMS. On the other hand, a new method of delivering an existing service as an outcome is exemplified when a telecommunication discovers a new way or technique of enhancing an existing service.

A review of contemporary service innovation studies in the telecommunication industry revealed that service innovation takes one of two forms: New service offering (Kim et al., 2013) and new method of delivering an existing service [Fan, 2010; Temraz, 2010; Santouridis & Trivellas, 2010; Grzybowski & Karamti, 2010; Chen, 2011; Grzybowski & Pereira, 2011; Essegbey & Frempong, 2011; Lin & Lin, 2012; Daim et al., 2014; Goyal, 2017].

Unsurprisingly, studies focusing on new service offering were limited [Kim et al., 2013]. This is attributed to the fact that, it costs telecommunication firms more to develop an entirely new service offering different from their core business than improving or enhancing an existing service [Uner et al., 2015; Burton et al., 2017]. In other words, it is much easier to enhance service delivery method than developing an entirely new offering outside the core of business. From the perspective of Kim et al. [2013], a new service offering is conceptualized as designing physical products such as telephones and other devices which hitherto are not core of the business offering but are now added as a new concept to expand the service/product offerings of a given telecommunication firm.

On the other hand, studies that conceptualized service innovation from the new method of delivering an existing service dimension, sought to identify the use of diverse means that would enhance how services are delivered to customers or subscribers [Temraz, 2010; Santouridis & Trivellas, 2010; Grzybowski & Pereira, 2011; Hussain et al., 2015]. From their perspective, new service delivery method was conceptualized by setting up a unique billing system that is both efficient and meets the diverse needs of subscribers [Grzybowski & Karamti, 2010; Daim et al., 2014; Dey et al., 2016; Goyal, 2017]. They would then proceed to using various promotional packages such as creating new interaction channels between suppliers, consumers and the service provider or enterprise as ways of improving the billing rate of calls, SMS and internet services [Aker & Mbiti, 2010; Essegbey & Frempong, 2011; Grzybowski & Pereira, 2011; Lin & Lin, 2012]. These studies went further to conceptualize new delivery method as enhancing service efficiencies using 3G data services and configuring websites to include interface for sharing videos through mobile devices and website portals [Fan, 2010; Chen, 2011; Nikou et al., 2012; Corte et al., 2015].

However, for the current study, service innovation is conceptualized as having both dimensions of new service offering and new method of delivering an existing service. Regardless of the tilt towards new method of delivering an existing service, which suggests new service offerings is difficult to come by in the telecommunication industry as discussed earlier, examining both variables will provide for a holistic view of telecommunication industry’s current position. Hence, the rationale for the study’s conceptualization of service innovation as new service offering and new method of delivering an existing service.
Having addressed the definitional issues in service innovation and how it is conceptualized in the telecommunication industry in the previous section and subsections, the study proceeds to how service innovation will be measured in the current study with emphasis on the specific indicator used.

### 2.2.1.4 Indicators of service innovation in the telecommunication industry

In this subsection, an overview of the specific indicators of service innovation within the telecommunication industry is conducted and the underlying indices used are identified. This subsection ends with the specific indices that will be adopted for measuring service innovation within the telecommunication industry in the current study.

Extant discourses have measured service innovation using different indices or indicators [Lin, 2011; Lin, 2012; Anning-Dorson, 2017; Chuang & Lin, 2015; Wang & Tsai, 2017; Bello et al., 2016; Ryu et al., 2015; Rousseau et al., 2016; Plattfaut et al., 2015].

Some of the studies measured service innovation by making emphasis on newness of the offerings using service modularity, service component and interface, service concept, service delivery and customer interaction and new technology as indices by developing questionnaires and conducting interviews to elicit response of service managers, project managers, customers and other stakeholders within the service context [Cheng et al., 2014; Plattfaut et al., 2015]. The next category of studies, focused on innovative activities that would result in enhancing a developed service offering with specific indicators such as extending existing service efforts, and improving the existing service value chain [Wu & Chiu, 2014; Chen et al., 2015; Wamba et al., 2017]. For example, Rousseau et al. [2016], used extending service effort as a measure of new service delivery by asking managers questions related to efforts made at extending or enhancing an existing service offering.

Based on the aforesaid and in line with the demarcation perspective of service innovation adopted in the current study, service innovation will be measured in line with previous studies by adapting their measures to suit the current study’s conceptualization of the term. For this study, new service concept or offering, new service delivery method and service modularity will be adopted as a measure of service innovation. Going by the how service innovation is conceptualized in this study, these set of indicators is a most suitable for the current study in that they are all outcome based or focused and can easily be measured by using the perceptual approach (questionnaires or interviews) on the outcome of this particular indices in their firm’s service innovation effort. Hence, service innovation in the current study is measured using newness of service concept and new service delivery method.

Having addressed the definitional issues in service innovation and how it is conceptualized in the telecommunication industry in the previous section and subsections, the study proceeds to the next section by conceptualizing firm performance in the telecommunication industry.
2.2.2 Conceptualization of firm performance in the context of service innovation

In this subsection, firm performance is conceptualized in the context of service innovation by reviewing previous studies to reveal the specific indicators of firm performance within the service industry and how the concept is defined.

2.2.2.1 Definition of firm performance

The performance of firms has been discussed and has received myriad of definitions based on the context the subject is defined [Huang & Hilary, 2018; Müller et al., 2018; Hallak et al., 2018]. Regardless of this, firm performance is defined as actual output measured or compared with planned intended output [Madison et al., 2018; Zona et al., 2018; Kafouros et al., 2018].

Consequent to this, firm performance is be measured using one of either forms: financial measures and non-financial measures or a combination of both [Ordanini & Rubera, 2010; Storey et al., 2016; Plattfaut et al., 2015; Anning-Dorson, 2017].

Financial measures employs the use of monetary instruments derived from accounting record [Platonova et al., 2018; Malagueño et al., 2018; Sangwa & Sangwan, 2018a]. Studies adopting this measure sought to use objective means [secondary data from annual reports and other financial documents] [Ordaninia & Ruberab, 2010; Cheng et al., 2014] or subjective means which relies on the perception [self-report] of managers, customers and other stakeholders [Chuang & Lin, 2015; Chen et al., 2015; Bello et al., 2016; Wamba et al., 2017] with specific indicators such as return on asset, return on sale, operating income as a fraction of net asset [from balance sheet], firm’s sales growth, profit level, and market share, return on investment, EBIT margin, number of employees [Cheng & shiu , 2016;Wang et al., 2015; Storey et al., 2016; Wang &Tsai, 2017]. For instance, studies that adopted the perceptual approach under the financial measure sought to elicit responses from senior managers and chief executive officers on a sales growth as an indicator of firm performance by asking “how does a product performs in the market relative to that of the competitors in terms of sales, return on investment and market share” [Wang et al., 2015; Candi, 2016; Rousseau et al., 2016; Lee et al., 2016].

On the other hand, non-financial measures uses non-monetary instruments to provide explanations on the how well a firm is doing [Platonova et al., 2018b; Black et al., 2018; Singh et al., 2018]. Although, this measure has no financial element but are regarded as key performance indicators affecting financial measures [Bini et al., 2018; Sangwa & Sangwan, 2018b; Nielsen et al., 2018]. This category of studies adopted subjective assessments (perception) of senior managers, chief executive officers, customers and other stakeholders on the performance of the firm [Wu & Chiu, 2014; Plattfaut et al., 2015]. The specific indicators used includes service quality, employee satisfaction customer satisfaction, and brand loyalty [Storey et al., 2016; Plattfaut et al., 2015].

The last category of studies combined both the financial and non-financial measures [Lin, 2011; Lin, 2012; Anning-Dorson, 2017]. These category of studies sought to have a more robust and holistic view of the firm by analysing both financial and non-financial measures [Lin, 2011; Lin, 2012; Anning-Dorson, 2017]. As earlier explained, this combined approach adopts the use of
objective and subjective measures [Profit, sales volume, market share, return on investment cash flow service quality, Customer satisfaction and employee satisfaction] [Anning-Dorson, 2017]. Typically, using this approach, self-reported questionnaires are developed to gain the perception of senior managers, employees and customers on the performance of the service firm [Lin, 2011; Lin, 2012; Anning-Dorson, 2017].

Consequential to these, the current study adopts the last approach which is a combination of both the financial and non-financial measure discussed earlier. The rationale for this is premised on the fact that studying service firm’s performance using only one of the measures may not actually portray the potentials of the constructs embedded in service innovations. However, using the combined approach, the study will provide for a detailed explanation and analysis regarding service innovation dimensions and the antecedent influences it has on performance of telecommunication firms in the Nigerian context.

As earlier clarified at the beginning of this subsection, the overall aim is to provide measurement indices of firm performance in the context of service innovation. Having achieved this aim, the next section provides detailed explanation on the underlying theories linking service innovation and performance of telecommunication firms.

2.2 THEORETICAL REVIEW

In this section, a theoretical review of service innovation and performance of telecommunication firms is conducted with the objective of identifying theories linking the two main variables in this study: service innovation and firm performance. After identifying and discussing extant theories, the appropriate theory that fits the current study is further discussed and the section concludes with a subsection discussing the theoretical framework adopted or developed in this study.

A review of extant studies that explored the relationship between service innovation and firm performance revealed that five theories served as the theoretical frameworks for a majority of these studies. These theories are discussed in the succeeding subsections.

2.3.1 Resource Based View

The most adopted theory was the Resource Based View (RBV) proposed by Birger Wernerfelt, a Danish economist and management theorist in the 1980s with the central focus on resources as very fundamental in sustaining superior performance of the firm [Nguyen et al., 2016; Taghizadeh et al., 2017; Raman et al., 2018]. However, RBV gained popularity with Barney’s article, “Firm Resources and Sustained Competitive Advantage” in 1991 [Wang & Tsai, 2018]. The major underpinnings of this theory stresses that external opportunities are easier to exploit using a firm’s existing resources than making attempts to acquire or develop new resources for exploiting each different opportunity [Sinkovics et al., 2018; Thanasopon et al., 2018; David-West et al., 2018].
Within the context of service oriented firms, RBV focuses on “tangible resources and invisible capabilities that can be the source of a sustainable competitive advantage” [Wang & Tsai, 2017 p.7]. Studies that adopted this theory, sought to examine how firm specific resources would improve performance [Cheng et al., 2014; Wang et al., 2015; Wang & Tsai, 2017]. The theory was employed to study how dimensions of exploration, exploitation and technology scouting which are representative of service innovation and resources of service firms facilitates or improves performance in terms of market share growth, sales growth, return on investment and profit levels relative to the that of competitors [Cheng et al., 2014; Wang et al., 2015; Wang & Tsai, 2017].

2.3.2 Dynamic Capabilities View

The second most adopted theory was the Dynamic Capabilities View (DCV) which was developed by American economists, David Teece, Gary Pisano and Amy Shuen in 1997 [Teece et al., 1997], emphasizing that the ability to react effectively and timely to external changes requires a combination of manifold capabilities [Teece et al., 1997; Teece, 2018; Laaksonen & Peltoniemi, 2018; Schilke et al., 2018].

DCV advocates that “the ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments” is seen as the capabilities of the firm (Chuang & Lin, 2015 p. 278). Service innovation-specific studies adopting this theory focused on how the external competencies of the firm can be enhanced whilst adapting to the dynamics of the environment [Schoemaker et al., 2018; Lo & Leidner, 2018; Esch et al., 2018].

DCV postulates that service firms that reconfigure their competencies (outcomes of innovations) would offer new services, enhance service delivery and improve overall firm performance through increased profits and customer satisfaction [Chuang & Lin, 2015; Plattfaut et al., 2015; Lichtenthal; 2015]. In the context of service innovation and firm performance, DCV was employed to explain how dimensions of improved service delivery methods and service customization using internet technologies results in enhanced firm performance [Chuang & Lin, 2015; Plattfaut et al., 2015; Lichtenthal; 2015]. Firm performance was measured using financial measures of sales and higher profit margins [Chuang & Lin, 2015; Plattfaut et al., 2015; Lichtenthal; 2015].

2.3.3 Resource Advantage Theory of Competition

The third most adopted theory was the Resource Advantage Theory of Competition (RATC) developed by American marketing professors, Robert Morgan and Shelby Hunt, [Morgan & Hunt, 1995]. Originally, the theory was developed as Resource Advantage (R-A) Theory and was subsequently developed to be termed R-A theory of competition [Hall et al., 2018; Varadarajan, 2018; Aslam et al., 2018]. The theory states that the value of a firm’s resources is seen in its ability to provide a distinct offering (value proposition) that enhances its performance relative to that of its competitors [Griffith & Yalcinkaya, 2010; Tate & Bals, 2018].

According to the R-A theory, a firm’s ability to develop an item (service or product) of value lies in the resources critical to its operation that would result in an advantage for the firm [Chou et
al., 2017]. The category of studies that adopted this theory premised service innovation to be new service concept, new service delivery and new client interface [Ryu et al., 2015; Chou et al., 2017]. More so, a firm’s advantage (typified as performance) was measured using a combined approach of financial (growth in sales from 2008-2010) and non-financial (customer satisfaction) measures [Ryu et al., 2015; Chou et al., 2017].

2.3.4 Contingency Theory

Closely trailing the R-A theory is the Contingency Theory [CT] which originated with the work of British professor in organization sociology, Joan Woodward in 1958 wherein she hypothesized that no one way exists in organizing a firm; however, the best decision is dependent upon the internal and external situations [Dobni & Klassen, 2018; Popp & Hadwich, 2018]. Categories of studies adopting this theory sought out to identify contingent factors: [i. firm size [ii. Technology [iii. dynamics of the environment and [iv. Innovation ambidexterity that would impact the success of service innovation and business performance of firms [McDermott & Projogo, 2012; Lichtenthale, 2016; Wang & Tsai, 2017]. These studies proceeded to identify exploration and exploitation innovation as dimensions of service innovation influencing performance of firms in terms of profit, sales and market share [McDermott & Projogo, 2012; Lichtenthale, 2016; Wang & Tsai, 2017].

2.3.5 Complexity Theory

The fifth theory most commonly adopted was the Complexity Theory [CoT] and it holds that interactions and feedbacks repetitively change systems and allows for spontaneous self-organization [Olya et al., 2018]. CoT underpinnings has diverse applications in explaining and understanding different phenomena (For example, genetic algorithm), however, the business side of CoT was propounded by scientists, Howard Sherman and Ron Schultz, of the Sante Fe Institute in New Mexico in the mid-1980s [Anning-Dorson, 2017a; Olya et al., 2018]. CoT draws on how the heterogeneity in the environment with other factors of technology and politics influences or shapes business performance [Anning-Dorson, 2017a]. CoT asserts that customer demands or expectations, market innovation and intensity of competition within an industry are great determinants of service innovation that service firms must adapt to and effortlessly understand in other to predict customers and meet other demands in the business environment to pave way for improved financial performance and customer and employee satisfaction [Anning-Dorson, 2017a].

2.3.2 Theory Selection Process for this study

This subsection discusses the steps taken in selecting an appropriate theory to underpin this study. First, the five theories discussed in the prior subsection served as the population from which one theory would be selected for this study. Second, in line with the demarcation perspective explained earlier, service innovation is defined as outcome-based innovation within the premises of new service offering and new service delivery method. This led to the elimination of CoT as a potential theory for this study as it stresses more on factors that could
potentially alter organizational systems and not on the service specific innovation outcome. This leaves four theories as contenders for adoption in the current study [DCV, RBV, R-A theory and CT].

Third, in order to select the most suitable theory from the remaining four theories, the demarcation perspective of service innovation which defines it as innovation in a specific service industry with more emphasis on the outcome of such service offering [Witell et al., 2015], is the litmus test that would be used to screen the four eligible theories. Therefore in considering the four eligible theories, all the theories met these selection criteria. However, R-A theory focuses more on how a firm can use its resources to gain superior advantage in the market place with much emphasis on outperforming the competitor. This rationale is objective but it fails to stress the individual firm-level capabilities and how they can be reconfigured to adapt other circumstances without necessarily comparing the firm to its competitors. Next is CT: the rationale for its elimination was its emphasis on contingent factors that would impact service innovation and firm performance without much attention on the capabilities of the firm that would result in specific innovation outcomes. More so, RBV was almost a perfect fit for the current study but the major drawback was its central focus of relying on the existing resources of the firm with less focus on developing or acquiring new capabilities or resources due to scarcity of resources available to the firm.

However, the appropriate theory for this study is DCV which focuses on how the external competencies [outcome] of the firm can be enhanced whilst adapting to the dynamics of the environment. Although the RBV theoretical framework provides insights as to the benefits derivable from firm specific resources and capabilities which results in competitive advantage, the DCV perspective is much more adequate in explaining different phenomena in a rapidly changing environment by adopting resources and capabilities to new competitive environments.

2.3.3 Theoretical framework for the study

As mentioned in the preceding subsection, DCV served as the theoretical framework in the current study. To reiterate, DCV posits that “the ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments" is seen as the dynamic capabilities of the firm [Chuang & Lin, 2015 p. 278]. Going by the demarcation perspective, the external competencies service firms utilized in developing [i. new service offerings and [ii. New service delivery method is the specific outcome that underpins the service innovation orientation of the firm and the accompanying performance.

New service offering is defined as physical products such as telephones and other devices which hitherto are not core of the business offering but are now added as a new concept to expand the service/product offerings of a given telecommunication firm [Kim et al., 2013]. As it relates to service innovation, it means the development of novel services or service-products that are new to the firm and the environment or industry it operates.

New service delivery method is defined as the utilization of diverse means that would enhance how services are delivered to customers or subscribers. Primarily, new service delivery method is a complementary service poised as increasing the efficiency and effectiveness of a service firm’s core services [Daim et al., 2014; Dey et al., 2016; Goyal, 2017].
Figure 1 presents the theoretical framework for this study, the DCV adopted in the current study assumes that the external capabilities of firm-specific service innovation is the outcome of new service offering and new service delivery method which in turn guarantees superior performance for the firm in the environment it operates. The performance of the firm has manifolds with particular emphasis on the accompanying financial benefits and improved customer satisfaction.

![Theoretical Framework of Service Innovation and Firm Performance within the Telecommunication Industry in Federal Capital Territory (FCT), Abuja, Nigeria](image)

**Figure 1: Theoretical Framework of Service Innovation and Firm Performance within the Telecommunication Industry in Federal Capital Territory (FCT), Abuja, Nigeria**

### 2.4 EMPIRICAL REVIEW

In this section, a review of the empirical evidences of prior studies on service innovation and firm performance is presented. As mentioned earlier in the conceptual review section of the current study, these prior studies can be categorized into two broad groups based on their conceptualization: i) New service offering, and ii) New service delivery method. The empirical review is also presented based on these two categories.

#### 2.4.1 New service offering

As previously discussed in the conceptual review section of this chapter, only a small minority of service innovation studies reviewed explored service innovation and performance from the perspective of new service offering [Aas & Pedersen, 2011; Prajogo et al., 2013; Anning-Dorson 2017; Wang & Tsai, 2017]. These studies are subdivided into two categories based on their specific objectives.

The first category of studies used performance measures to compare whether or not new service offerings impact firm-level financial performance [Aas & Pedersen, 2011; Anning-Dorson 2017], while the second category sought to examine the influence of exploitative innovation on firm performance [Prajogo et al., 2013; Wang & Tsai, 2017]. In the succeeding paragraphs, each of the category is discussed more in detail.

Aas and Pedersen [2011] and Anning-Dorson [2017] adopted quantitative approaches to examine whether or not new service offering impacts firm-level financial performance. In Norway, Aas
and Pedersen [2011]) surveyed a sample of 1132 service and 3575 manufacturing firms while comparing the impact of service innovation on financial performance variables including operating results, profitability and productivity. They adopted the Mann–Whitney–Wilcoxon tests for the hypotheses proposed in their study. The empirical evidences revealed that both service and manufacturing firms have significantly higher operating results based on the number of employees. Further analysis revealed that the operating growth results in manufacturing firms focusing on service innovation is highly significant in contrast to that of service firms. More so, both service and manufacturing firms were found not to have a significantly higher profitability than firms not focusing on service innovation. They concluded that the results of financial effects of service innovation activities is not universal across all industries and financial indicators used, however, firms imbining the service innovation dimension of new service offerings would naturally outperform those not focusing on service innovation activities. As for Anning-Dorson [2017], they conducted a cross-country questionnaire survey on firms operating in two countries [United Kingdom and Ghana] while analysing 372 respondents. Regression analyses was employed to analyse the data collected from the field. The findings suggests that involvement capabilities and firm performance is mediated by innovation [product] which helps firms with new service concept or innovative products that meets customer or industry requirement. Despite the lack of positive and direct relationship between involvement capability and firm performance in the United Kingdom, findings show that it is an important antecedent to innovation in new service offering for enhanced service firm performance.

Moving on to the second category, Wang and Tsai [2017] investigated the influence of service innovation on service-oriented firm performance by surveying 170 service-oriented firms in Taiwan. The data collected were analysed using Ordinary Least Squares [OLS] regression and the Zero-Inflated Poisson regression [ZIP] to analyse the responses of respondents. The results supports the hypothesis proposed in the study that ambidextrous innovation which is an integrated approach view of exploration [innovation perspective that focuses on continuous pursuit of new service offerings] does significantly enhance firm performance. The empirical proof gotten further suggests that service innovation oriented firms would naturally strengthen the performance of their firms. As for Prajogo et al [2013], they conducted a survey of Australian service firms in comparison with that of New Zealand Standard Industrial Classification using questionnaires. A total of 180 responses with an effective response rate of 12% were retrieved and found appropriate for analysis using regression analysis. Their study was tailored towards examining the effect of innovation on business performance between the two firms. Findings suggests that explorative innovation which is representative of how a new service offerings by a firm that is entirely different from its core services is positively and significantly related to business performance. This then suggests that firms that imbibe an explorative innovation orientation will constantly pursue new and time-to-market opportunities that would result in enhanced business performance in terms of financial or non-financial aspects. This concludes the review of studies that adopted the new service offering dimension of service innovation. The next subsection provides a review of studies who explored service innovation and firm performance from the new service delivery method dimension.

2.4.2 New service delivery method
The studies reviewed in this subsection can be subdivided into two broad groups: The first category represents studies that explored the relationship between new service delivery methods and financial performance, and the second category represents studies that explored the relationship between new service delivery methods and non-financial performance. These categories of studies are further divided into subcategories and discussed, and the methodology used as well as findings in each category and subdivision of the studies are highlighted in the succeeding paragraphs.

The first category represents studies that focused on the relationship between new service delivery methods and financial performance [Ordanini & Rubera, 2010; Lin, 2012; Lin, 2013; Huang, 2014; Chuang & Lin, 2015; Ryu et al., 2015; Bello et al., 2016; Wamba et al., 2017; Wang & Tsai, 2017; Kankam-Kwarteng et al., 2018]. The studies within this category used financial measures in investigating financial performance and are further subdivided into two subdivisions namely: i) Information technology [IT] based new service delivery methods [Ordanini & Rubera, 2010; Huang, 2014; Chuang & Lin, 2015; Wamba et al., 2017], and ii) service schemes based new service delivery methods [Lin, 2012; Lin, 2013; Ryu et al., 2015; Bello et al., 2016; Wang & Tsai, 2017; Kankam-Kwarteng et al., 2018].

Starting with studies adopting IT based new service delivery methods, in Italy, Ordanini and Rubera [2010] investigated a cross-section of firms drawn across service and manufacturing industries. Their study adopted a stratified random sampling technique using a computer-aided telephony inquiry [CATI]. T-statistics was employed to verify each factor loading and the data collected were found to be statistically significant and greater than the cut-off point of 0.50. Thereafter, the data collected were analysed using the SEM approach, specifically Partial Least Square; the Smart PLS 2.0 software. Using financial data extracted from balance sheet of firms listed in the Italian Stock Exchange, empirical evidence showed that IT innovation in terms of e-commerce, innovation orientation targeted towards enhancing existing service delivery method, IT service providers capabilities in terms of slack business resources [technology] and readiness to adopt IT innovation significantly impacts financial performance. They concluded by stating that performance drivers for IT service innovators would allow for developing or enhancing service delivery method from the bundle of IT capabilities and slack resources.

More so, Huang, [2014] conducted a questionnaire survey using a total sample of 164 top ranked service firms in Taiwan while examining the influence of alignment in service innovation on financial performance of firms. Structural equation model [SEM] was used in analysing the data collected. The findings revealed that a strategic co-alignment between service innovation and IT usage would naturally result in improved financial performance. They then concluded by stating that adopting a new service delivery method dimension of service innovation provides a gateway for firms to meet customers and market needs as well as ensuring firm growth and profitability.

In addition, Chuang and Lin [2015], carried out a quantitative survey and analysis of 119 financial service firms in Taiwan on the antecedents of e-service innovation and the outcomes on firm value [in terms of market share] using SEM and partial least-square [PLS] procedures. The results suggests that e-service capabilities which are new service delivery efforts impacts firm outcomes in terms of market share. The study concluded that e-service innovations are efficient means of influencing market shares through leveraging on information from internets and other
online platforms for service customization and delivery [Chuang & Lin, 2015]. Thus, providing e-service solutions are seen as an effective way of increasing a firm’s market share.

As for Wamba et al. [2017], they conducted an online survey of the influence of big data analytics (BDA) on firm performance using a big data analytics capability [BDAC] model. The research methodology employed was used to collect data from 297 managers and business analysts within the Chinese IT industry which were then analysed using PLS-SEM. The findings revealed that big data analytics which is representative of new service delivery method does impact financial performance of firms in terms of sales growth. They went on to conclude that BDA as a sustainable source of competitive advantage made available by the firm’s IT capabilities would naturally enhance the firm performance of IT firms [Wamba et al., 2017].

Majority of the studies adopting the new service delivery method and financial performance perspective fell under the second subdivision of the first category of studies reviewed [Lin, 2012; Lin, 2013; Ryu et al., 2015; Bello et al., 2016; Wang & Tsai, 2017; Kankam-Kwarteng et al., 2018]. These category of studies focused majorly on service schemes based new service delivery method. Within this subcategory, five (5) studies showed a strong positive relationship between new service delivery method and financial performance [Lin, 2012; Lin, 2013; Ryu et al., 2015; Bello et al., 2016; Wang & Tsai, 2017; Kankam-Kwarteng et al., 2018], with only one study not showing a positive relationship between variables of new service delivery method and financial performance [Ryu et al., 2015].

Interestingly, Lin [2012], conducted an empirical inquiry focused on the intensity of innovation types on firm performance in the communication industry in China. Utilizing a questionnaire survey, 2620 questionnaires was administered to executives, employees and customers of Telecom operators in China and the results were analysed using structural equation model [SEM]. The findings gotten from the empirical tests of hypotheses revealed that indeed external innovation intensity impacts financial performance of firms in terms of sales and return on investment [ROI]. External innovation intensity focuses more on new service delivery that better positions the firm for competition amongst other firm in the industry [Lin, 2012]. The study concluded that external innovation focuses on new service delivery, development or enhancement in response to market needs and customer demands [Lin, 2012].

Still remaining within the categories of studies in the second subdivision, Lin [2013], investigated the impact of service innovation on business performance in service firms in China, sampled 277 respondents using a questionnaire survey in China’s tourism sector at the level of the firm. The data collected from the field were analysed using structural equation model [SEM]. The findings from the empirical investigation revealed that service quality achieved by adopting new service delivery method, would influence financial performance. He then concluded that the distinction of performance and new service delivery method can be explained by the variation of service innovation activities [Lin, 2011].

Still remaining within the first category of studies, Bello et al. [2016], conducted an empirical investigation of professional service firms [PSFs] performance and innovative service offering in India. Data were collected from a sampled 202 PSFs and was analysed using structural equation model [SEM] MPlus 7.0. The findings revealed that innovativeness of service offerings in terms of new service delivery method influences financial performance of PSFs. This is suggestive that
PSFs with an entrepreneurial orientation have the propensity to be proactive in terms of customer relations, lowering costs and other activities that would enhance and strengthen the value proposition of the firm. More so, the extent to which PSFs are successful is a measure of the innovativeness of their service offerings [new service delivery method]. They then concluded that innovativeness of PSFs is positively linked to financial performance, consistent with extant research.

As for Wang and Tsai [2017], they conducted a survey with a dataset comprised of 170 service firms from Taiwan. Ordinary Least Square [OLS] regression and zero-inflated regression [ZIP] was used to check the statistical significance of the hypotheses developed in their study. The findings revealed that new service delivery method concerned with activities targeted at enhancing existing products and service lines would enhance financial performance in terms of market share [Wang & Tsai, 2017]. The study concluded that service innovation and firm performance is contingent on new service delivery method [Wang & Tsai, 2017].

More recently, Kankam-Kwarteng et al. [2018], conducted a questionnaire survey of Small and Medium Enterprises [SMEs] auto service providers [auto mechanics and electricians] in Ghana while examining the link between service innovation and firm performance. Adopting a probability and non-probability sampling technique, 200 firms from the total SMEs population was selected for the study. The data collected from the field was analysed using regression analysis. The findings provided evidence to support the hypothesis that pricing capabilities [new service delivery method] mediates the relationship between service innovation and firm performance. They then concluded that new service delivery methods [pricing and billing systems] is a service innovation activity influencing financial performance in terms of return on sales, growth in sales and return on investment [Kankam-Kwarteng et al., 2018].

Contrary to studies showing a strong positive relationship between new service delivery method and financial performance, the findings of Ryu et al. [2015], revealed no relationship between the variables. In their study of 175 Korean firms sampled from different service industries in examining the effect of service delivery orientations on firm performance using survey questionnaires over a three year period [2008-2010]. Moderated multiple regression analysis was employed to analyse the data using SPSS software version 12.0. Evidence gotten from the empirical tests of hypotheses revealed that service delivery focused activities or orientation is not significant to the financial performance of firms [Ryu et al., 2015]. A possible explanation for the lack of relationship between financial performance and service delivery focused activities is that it is unlikely for firms to search for new opportunities outside their niche as, this is attributed to the fact that firms would naturally choose the option of adjusting their internal structures and technological prowess in improving their operational efficiencies within a certain domain at a time [Ryu et al., 2015]. Their study which cuts across different industries suggested that new service delivery method brought about by service innovation activities of the firm is a predicate for the long term survival of the firm. In the light of this, striking a balance between the service innovation strategy of a firm and its performance requires an alignment of its new service delivery method [Ryu et al., 2015].

On the other hand, the second category of studies focusing on new service delivery method and non-financial performance employed the use of non-financial measures in examining firm
performance [Santouridis & Trivellas, 2010; Lin, 2012; Yen et al., 2012; Wu & Chiu, 2014; Uner et al., 2014; Ryu et al., 2015]. Studies adopting the use of non-financial metrics are discussed under two subdivisions namely: IT based new service delivery methods [Santouridis & Trivellas, 2010; Yen et al., 2012; Wu & Shiu, 2014; Uner et al., 2014], and on the other hand, service schemes based new service delivery method [Lin, 2012; Ryu et al., 2015]. Accompanying studies in these subdivisions is highlighted and discussed.

Studies in first subdivision had as their objective the use of IT based applications or techniques enhancements [Santouridis & Trivellas, 2010; Yen et al., 2012; Wu & Shiu, 2014; Uner et al., 2014]. Santouridis and Trivellas [2010] investigated the crucial factors leading to customer satisfaction in the mobile telephony industry in Greece. Adopting an interviewer-administered questionnaire, new service delivery method variables of pricing structure and billing system were examined using 205 respondents and analysed using mediated regression analysis. Findings suggested that pricing structure, billing system and other value-added services in the mobile telephony sector enhanced non-financial performance in terms of customer satisfaction. This suggests that adopting a new service delivery method dimension in the service innovation activities of a firm is a predicator for non-financial performance in terms of customer satisfaction, brand loyalty and service quality [Santouridis & Trivellas, 2010].

Similarly, Yen et al. [2012], had as their objective, evaluating service innovation readiness (SIR) and outcomes in Taiwan. The study which surveyed 312 Taiwanese firms was analysed using PLS, provided empirical evidence to support the notion that service innovation readiness in terms of IT innovation does impact performance outcomes of service firms. Service innovation dimensions that stresses new service delivery methods would bring about sustainable growth and improved customer satisfaction. They then concluded that service innovation is a complex phenomenon determined only by a variety of capability [new service delivery method] conceived as enabling mechanisms in service innovation activities of the firm [Yen et al., 2012].

Conversely, Wu and Shiu [2014], conducted a survey using corporate-level businesses [manufacturing, service, financial and banking] in Taiwan. Using a sample size of 303, which is consistent with the maximum likelihood estimation [MLE], SEM implemented by AMOS 7.0 software was utilized in analysing the data collected. The findings reveal that there is indeed a relationship between new service delivery method and competitive performance of firms. New service delivery method in terms of internet based supply-chain contributes enormously towards IT –supported competitive performance [Wu & Shiu, 2014]. The study concluded that IT dynamic innovation capabilities directed towards enhancing service delivery of corporations are sufficient for improved competitive performance.

More so, Uner et al. [2014] had perhaps a more IT centric view of new service delivery method using bundled packages. They interviewed a random sample of 766 subscribers in the Turkish Telecom industry while investigating bundling preferences of subscribers. Logit regression was used to analyse the data collected. Evidences gotten showed that respondents (subscribers) expressed strong intention to purchase bundled packages which in turn enhances their satisfaction. Also, socio-economic and demographic factors were found to be positively correlated to bundled packages. Findings suggested that bundled packages were inferred as cost-saving from the perspective of the customers or subscribers even if there was no actual discount
attached to such packages by the telecom or service provider. In addition, new service delivery in terms of bundled packages provided by telecom service providers positively impacts firm performance in terms of customer satisfaction and loyalty to the brand. The study concluded that since subscribers or customers perceive bundled packages as discounts or cost-saving even if there is not explicit information suggesting so, service providers should avoid unnecessary discount of their bundles.

Next, studies within the second category represent the least number of studies focusing on the service schemes based new service delivery outcomes [Lin, 2012; Ryu et al., 2015]. These studies are highlighted and discussed in the succeeding paragraphs.

Lin [2012], explored the effect of new service delivery methods on performance using statistical process control [SPC] framework in their survey of telecom operators in China. Their study employed the use of questionnaires directed at firm executives, employees and customers for completion by self-report. In all, 2620 questionnaires were retrieved with an average response rate of 15 minutes. Based on the survey data obtained, SEM was employed to conduct the data analysis. The empirical investigation revealed that service innovation dimension of new service delivery methods in terms of customer problem-solving focus and communication with clients is positively associated with customer retention level and the proportion of new customers in total customers. More so, findings suggests that customer problem-solving focus and communication with clients through diverse means is the priority of the service firms examined [Lin, 2012]. The study concluded that cost-effective new service delivery methods enhances customer retention level and satisfaction in China’s service firms [Lin, 2012].

Ryu et al. [2015] investigated 175 Korean firms using survey questionnaires over a three-year period, 2008-2010. Moderated multiple regression analysis was employed to analyse the data collected. Findings revealed that new service delivery method focused activities is highly significant to the non-financial performance of firms [Ryu et al., 2015]. Their study which cuts across different industries suggests that new service delivery method brought about by service innovation activities of the firm is a predicate for the long term survival of the firm. In the light of this, striking a balance between the service innovation strategy of a firm and its performance requires an alignment of its new service delivery method [Ryu et al., 2015]. This concludes the empirical review of literatures adopted in the current study. Next, the gaps in literatures identified is presented, then the study proceeds to the next chapter.

### 2.4.3 Gaps from literature

In this subsection, the gaps identified from literature is presented. The gaps represents grey areas that previous studies did not address, that the proposed study seeks to address. The succeeding paragraphs highlights three major gaps.

Firstly, service innovation as an important context has been studied all over the world. However, results or manifestations are quite distinct in different contexts globally. As such, different contexts have certain particularities. Observably, empirical tests from the service innovation and performance specific studies adopted in the current study revealed meagre literatures conducted in Africa. Hence, the current study will contribute to literatures in Africa and offer the current
perspective of telecom specific service-oriented firms in the region with Nigeria as a reference point.

Secondly, from the literatures exploring the relationship between service innovation dimensions of new service offerings, new service delivery method and firm performance, the use of closed-ended survey questionnaires is predominant. The use of closed-ended questionnaires comes with its own weakness in that the respondents are restricted to providing responses to the set checklists designed in the survey questionnaires. In the light of this, insights gotten might not reveal the true state of affairs in the firm. The current study proposes the use of multi research methods (interviews and questionnaires) to augment for the weaknesses and biases of both instruments.

Thirdly, industry-wise, discourses on telecom specific service-oriented is meagre. From the commentaries reviewed, there has been much emphasis on multi industry study or perspectives of banking, financial services, manufacturing, tourism and telecommunication [Lin, 2013; Huang, 2014; Ryu et al., 2015; Chuang & Lin, 2015; Wamba et al., 2017] with only a few communication or telecommunication specific studies [Ordanni & Rubera, 2010; Lin, 2012; Uner et al., 2014]. In the light of this, the thrust of the current study focuses on service innovation and performance of telecommunication firms in FCT, Abuja as an attempt to enriching telecom specific studies at the level of the firm.

CONCLUSION

From the review of specific service innovation and firm performance in telecoms literature, it has been revealed that in modern parlance, the dimensions of new service offering and new service delivery method of service innovation is predominant. However, the review concludes that this is the planning phase for further empirical investigation particularly in the telecommunication industry in Nigeria.

REFERENCES


